#### WILDLIFE MANAGEMENT UNIT 8A - NORTH SLOPE, SUMMIT

### **BOUNDARY DESCRIPTION**

**Summit County** - Boundary begins at the junction of Highway SR-150 and the Summit-Duchesne county line (summit of the Uinta Mountains); north along SR-150 to the Utah-Wyoming state line; east along this state line to the Brunt Fork-Birch Creek drainage divide; south along this drainage divide to the Burnt Fork-Sheep Creek drainage divide; south along this drainage divide to the Summit-Duchesne county line (summit of the Uinta Mountains); west along this county line to SR-150 and beginning point.

# **Unit Description**

The North Slope, Summit Wildlife Management Unit is located along the north slope of the Uinta Mountains in Summit County. Unit 8A is a sub-unit of the North Slope Wildlife Management Unit. The other sub-unit, 8B, covers Daggett County. Elevation of unit 8A ranges from 7,500 feet to over 13,000 feet. Habitat varies from sagebrush and mountain brush communities to alpine tundra above the timberline which includes vast expanses of lodgepole pine. Several major drainages are located within the unit including: Bear River, Black's Fork, Smith's Fork, Henry's Fork, and Burnt Fork. Winter range in Utah is a critical limiting factor on the unit with many deer wintering in Wyoming.

In previous reports, the 5 trend study sites in this unit were included in Herd Unit 9 - Daggett. The study areas in herd unit 8A emphasize areas around Widdop Mountain and the Bald Range which are just west of the herd units eastern boundary and Burnt Fork-Birch Creek drainage divide. This area is considered important winter range for elk which summer on the north slope of the High Uinta mountains. According to the 1995 Big Game Harvest summary (Evans et. al 1995), there is approximately 365,000 acres of summer range on the unit, 88% of which is administered by the U.S. Forest Service. Private land owners control 11%, while the State of Utah administers 1%. There is about 35,100 acres of winter range with the majority (44%) being privately owned and another 42% administered by the Forest Service. The state owns 7%.

To meet the need for vegetative trend data on key elk winter ranges on the North Slope of the Uinta Mountains east of Beaver Creek, 6 new interagency range trend studies were established in the area in September 1988. The key areas are found on the mountain mahogany slopes of Phil Pico Mountain, Bald Range, Widdop Mountain, and Jessen Butte. These areas are mostly public land, although there is a considerable amount of private land in the Birch Creek and Beaver Creek drainages below the U.S. Forest boundary. The state of Utah owns several large sections, containing the study areas on Phil Pico Mountain (8B-8) and the Bald Range (8A-3 & 4). The study sites on Widdop Mountain (8A-1 & 2), including Telephone Hollow (8A-5), are in the Wasatch National Forest. The site on Phil Pico Mountain is now within sub-unit 8B and will be discussed in that section.

These sites receive moderate to heavy use by elk in the winter. Deer use is light to moderate in the winter with some summer use. Four of the 5 trend sites also show light winter use by moose, with year round antelope use of the area. Degree of winter use by antelope and deer is dependent on weather conditions. All areas are permitted for livestock grazing. While the valleys are often heavily used by cattle, on-site observations indicate light use or no use on the steep, mountain brush hillsides.

# <u>Unit Management Objectives</u>

The management plan for Unit 8 (8A & 8B), includes a target herd size of 5,300 wintering deer with a composition of 15 bucks to 100 does. Thirty percent of the bucks are to be 3-point or better. The elk management objective is to achieve a target winter herd size of 2,100 (1,600 in Summit and West Daggett; and

500 in the Three Corners) with a minimum post season bull to cow ratio of 8:100. At least 4 of these bulls will be  $2\frac{1}{2}$  years of age or older (DeBloois et. al 2001).

# Study Site Description

All range trend studies in Unit 8A sample the true (birchleaf) mountain mahogany range type. These studies provide a good representation of a majority of the key birchleaf mahogany winter range in the area. Except for Widdop Mountain North Slope (8A-2) which is situated on a north slope, the remainder of the study sites are located on south-facing slopes. These slopes tend to be moderately steep with rocky soil, typical of the dry, coarse, shallow soils often occupied by mountain mahogany.

All of the 5 trend study sites in sub-unit 8A were established in 1988 and reread in 1995. During the 2000 and 2005 season, 4 of the 5 studies were reread; Bald Range South (8A-3) was discontinued due to its close proximity to and similarity with Bald Range (8A-4).

#### **SUMMARY**

### WILDLIFE MANAGEMENT UNIT - 8A NORTH SLOPE SUMMIT

Five trend study sites were established on this management unit in 1988 and reread in 1995. In 2000, Bald Mtn. South (8A-3) was not reread due to its close proximity to Bald Range (8A-4). However, a pellet group transect was read and annual growth of mountain mahogany was measured. Three trend studies are located around Widdop Mountain and 2 are on the Bald Range. They all sample true mountain mahogany stands which are considered important elk winter range. Moose, deer, and antelope also use these sites. Pellet group data from 2005 indicate an average of 46 elk use days/acre (114 edu/ha) on the four trend studies in unit 8A. A high of 75 elk days use/acre (185 edu/ha) was found on Bald Range (8A-4). A low of 30 elk days use/acre (73 edu/ha) occurred at Telephone Hollow (8A-5). Moose use was found on all 4 of the sites read in 2005, Widdop Mtn. South Slope (8A-1), Widdop Mtn. North Slope (8A-2), Bald Range (8A-4), and Telephone Hollow (8A-5). Widdop Mtn. North Slope contained the most pellet groups and estimated 19 moose days use/acre (47 mdu/ha). Bald Range had the least moose use at an estimated 1 moose days use/acre (2 mdu/ha).

The key browse species on all 5 trend study sites consists of true mountain mahogany. Browse trends for all four sites in 2005 were stable. Leader growth average 3.8 inches in 2005 versus 2.4 inches in 2000, due to the unusually dry conditions in 2000. Browsing of mahogany was heavy in 2005, averaging 78%. All of the mahogany populations on these sites are in good health with abundant young plants, stable mature populations, good vigor, and low percent decadence. The following series of values are averages listed in order of year sampled (1995, 2000, and 2005). These averages are as follows:

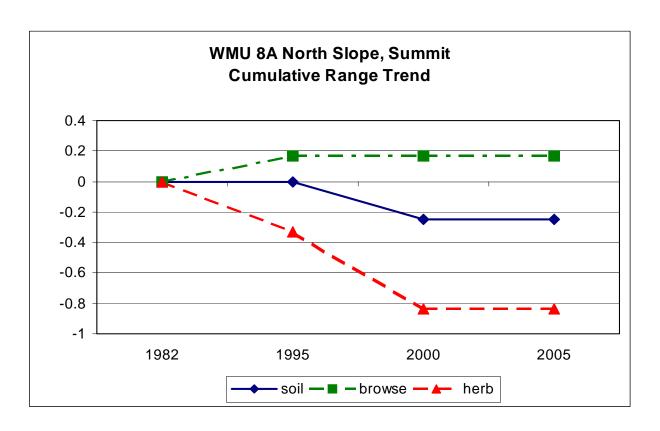
- percent decadence..... 1%, 7%, and 4% for True Mtn. Mahogany
- percent dying......<1%, 2%, and 2% for True Mtn. Mahogany
- population changes... 5,185, 5,700, and 5,795 plants/acre for True Mtn. Mahogany (+12 % change)

Herbaceous trends were stable to slightly up on 3 of the 4 sites, which were improved after a return to normal precipitation patterns. The following values show percent change in nested frequency values for perennial grasses and forbs for True Mtn. Mahogany from 1995 and 2005.

- percent change for perennial grasses...-8% for True Mtn. Mahogany
- percent change for perennial forbs.....-0.6% for True Mtn. Mahogany

Cumulative Range Trends-WMU 8A North Slope, Summit

	1982	1995	2000	2005
soil	0	0.0	-0.3	-0.3
browse	0	0.2	0.2	0.2
herb	0	-0.3	-0.8	-0.8



Trend Summary

	Category	1982	1995	2000	2005
8A-1 Widdop Mtn. South Slope	soil	est	0	0	0
	browse	est	0	0	0
	herbaceous understory	est	-1	0	-1
8A-2	soil	est	0	0	0
Widdop Mtn North Slope	browse	est	0	0	0
	herbaceous understory	est	-1	-1	+1
8A-3 Bald Range South	soil	est	0	NR	NR
	browse	est	+1	NR	NR
	herbaceous understory	est	-1	NR	NR
8A-4	soil	est	0	0	0
Bald Range	browse	est	0	0	0
	herbaceous understory	est	0	-1	0
8A-5	soil	est	0	-1	0
Telephone Hollow	browse	est	0	0	0
	herbaceous understory	est	+1	0	0

	Category	1982	1995	2000	2005
	soil		0.3	-0.3	-0.3
Average Range Trend	browse		0.2	0.0	0.0
	herbaceous understory		-0.3	-0.8	0.3
Total Number of Sites Read 5		5	5	4	4

 $<sup>(-2) = \</sup>text{down}, (-1) = \text{slightly down}, (0) = \text{stable}, (+1) = \text{slightly up}, (+2) = \text{up},$  (est) = site established, (NR) = site not read

Precipitation graphs for the North Slope Summit and Daggett unit. Data is percent of normal precipitation averaged for weather stations on the Manila, Flaming Gorge, Allen Ranch, and Mountain View, WY (Utah Climate Summaries 2005).

